

Amendments to the Specification:

Please substitute paragraph [029] on page 12 of the substitute specification filed July 27, 2001 in place of the paragraph bridging pages 17 and 18 of the application as originally filed as follows:

[029] The Recognin derivative vaccine can be any product larger, smaller or the same molecular weight which contains the immunological specificity of malignin, Recognin L or Recognin M, (see ~~U.S. Patent No. 4,976,957 (S.N.07/744,649~~ application Serial No. 07/744,649 and the applications of which it is a continuation-in-part as listed above incorporated herein by reference) can be used. The vaccine can be entirely produced from tissues or cells, or it may be entirely synthetic, or any combination of the two. For example the Recognin derivative vaccine malignin glycoprotein precursor, molecular weight approximately 250,000 Daltons, or any fraction thereof which contains the immunological specificity of malignin, Recognin L or recognin M can be administered as vaccine to individual humans or animals for example, but not exclusively, in doses of approximately 1 mg or more subcutaneously, and the quantity of anti-Recognin determined by the methods shown in Example 2 as well as changes in immune cells, such as B cells, T-cells, both helper and suppressor, macrophages, before and after the administration of vaccine. The level of anti-Recognin will increase approximately 10 days after the first administration of vaccine. Regardless of whether the increase has occurred, a second dose of vaccine is given after the blood specimen is taken for anti-Recognin determination, and 10 days later, a third blood specimen is taken for anti-Recognin determination and a third dose of vaccine is administered. Thirty days after the first dose of vaccine is administered, the anti-Recognin level should be at a maximum. Additional booster doses of vaccine may be given to maintain the level of antibody achieved and depending upon the degree of risk of cancer exhibited by the subject. For example in a family in which the grandmother, mother, and each of the two sisters have developed breast cancer, for the remaining sister who is receiving the vaccine the physician in charge may decide that more frequent boosters are required. Where the vaccine is used for prevention, the changes in anti-Recognin and immune cells will be followed. Where the vaccine is used in treatment of already present clinical cancer, all clinical and laboratory determinations appropriate to the type of cancer and its stage (eg. CATSCANS, MRI, blood counts in hematological malignancies, etc.) also will be followed for evidence of beneficial effect.